

---

## **Session 5: Harmonize the training of the inspectors to achieve the same professional level of the inspections (TWG 5)**

---

### **Survey about training of sprayer inspectors and examination procedures for licencing of inspectors in Europe**

**E. Nilsson**

Visavi God Lantmannased AB, Vellinge, Sweden

DOI 10.5073/jka.2015.449.0017

The training and examination of sprayer inspectors is an important factor to harmonise inspection procedures between countries and for mutual recognition of inspectors and inspections. The subject has been presented and discussed during SPISE III in Brno 2010 and at SPISE IV in Lana 2012.

During 2013, SPISE TWG 5 made a survey in all EU Member States plus Norway, Serbia and Switzerland regarding the present situation for training an examination of inspectors. 25 countries answered. The questionnaire contained questions about course length, topics in course plan divided in oral lectures and practical, examination procedures and validity time for certificated.

17 countries have answered on questions about the course plan. Several countries have not yet a training system finished and most countries will have to make revisions in training as the new standards for inspection of sprayers in use, the EN ISO 16122 – series, will be implemented. Also examination procedures may need to be revised to get mutual recognition.

The survey has shown two mayor lines of procedures of inspection: Inspection as a pure control and inspection with control plus identification of failures and give recommendations how to repair or to do repairs. The different approaches requires different course plans.

The basis for the training is the baseline for the approved inspectors knowledge, which can has been characterised as:

- Participated and approved in recognized training
- Knowledge of the organizational aspects of inspection and testing procedure
- Able to carry out the test safe and without pollution of the environment.
- Have sufficiently knowledge of the functioning of the sprayer and needs for an effective and efficient execution of the test.
- Can interpret the technical data required for the testing independently and in a correct manner.
- Able to operate the necessary testing equipment and to interpret the measured values in the correct manner.
- Able to carry out the controls and measurements independently and in a correct manner.

- Can use independently and in a correct manner the applying National approval - and rejecting criteria for the sprayers.
- Can fill in independently the testing forms in the obligatory manner
- Can formulate a correct, clear, objective and well founded repair recommendation on the basis of the results of the test to the owner of the sprayer

During examination procedures a combination of oral and practical examination is mainly used among the countries. The examination is often done by external bodies or at least supervised by official authorities.

A main course-structure seems to be suitable; four days with three days training and last day exams. Course-plan may have different emphasis depending on the type of equipment to be inspected, depending on what is dominating in the region.

However, the background training and education of staff that will execute the inspections varies a lot between and within countries. Often mechanics working on shops for agricultural machinery are engaged for the inspections. The background education for those can be broad and deep, specialised in agricultural machinery or more general. Also advisors, with no special mechanical training, perform inspection of sprayers. In many cases inspectors have also many other tasks in the company or organisation. But there are described also situations where staff work full-time with only inspection of sprayers in use.

At the time of the questionnaire, the new harmonised standards, EN ISO 16122-series, where not yet approved or in force, so all information is based on situation based on training to perform the inspections more or less according to the EN 13790. Already at this stage there is a huge span in the training of inspectors, from 1 day plus examination to one month training. The courses may have different focus on sprayer types depending on local variations. Boom sprayers seems to be a general topics but in some areas only sprayers for tree and bush crops exists in other areas only fixed or semi mobile sprayers used in glass houses or nurseries are relevant.

Refresher courses length, content and interval vary. It can be assumed that new refresher-courses needs to be developed to include new sprayer types in the testing schemes. Also the establishment of report systems necessary in a mandatory system needs new training.

Therefore it seems not possible to propose and get acceptance for a common course length or course plan in all countries neither for basic courses nor for refresher courses.

Arrangements of European course to train trainers may however be desirable.